



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,453	02/24/2004	Brian R. Tunning	MS1-1846US	4913
69316	7590	06/21/2007		
MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052			EXAMINER CHANNAVAJJALA, SRIRAMA T	
			ART UNIT	PAPER NUMBER
			2166	
			MAIL DATE	DELIVERY MODE
			06/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/786,453

Applicant(s)

TUNNING, BRIAN R.

Examiner

Srirama Channavajjala

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 03 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 and 29-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 and 29-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Claims 1-27,29-54 are pending in this application.
2. Examiner acknowledges applicant's amendment filed on 4/3/2007.
3. Claim 28 has been cancelled [4/3/2007].
4. Claims 1,10-13,19-21,24,29-30,35,39-40,46,48-58 have been amended [4/3/2007].

Drawings

5. The Drawings filed on 2/24/2004 are acceptable for examination purpose.

Information Disclosure Statement

6. The information disclosure statement filed on 2/24/2004 and 7/2/2004 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

35 USC § 101

7. In view of applicant's amendment to claims, the rejection under 35 USC 101 as set forth in the previous office action is hereby withdrawn.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. ***Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoppe et al. [hereafter Hoppe], US Patent No. 5515488, published on May 7, 1996.***

10. As to claim 1, Hoppe teaches a system which including "A visual query system [col 3, line 35-40, fig 8-9], comprising: 'query criteria of a query expression displayed as shapes that have a semantic relationship which represents logical associations between the query criteria' [col 6, line 38-55], col 7, line 42-51, fig 2-4, fig 8-9], query criteria for display corresponds to fig 4, search scope description; shapes that have a semantic relationship which represents logical associations between the query criteria corresponds to fig 2, element 202 specifically search expressions , semantic relationships corresponds to relationships between elements of known categories of data for example in the relational database , the relationships between elements as detailed in col 6, line 47-52, logical associations corresponds to fig 8-9 particularly sets, subsets from the Venn diagram, further it is noted that Venn diagram represents all possible "Boolean queries" [col 3, line 7-8], therefore, semantic relationship represents logical association between the query criteria

'a user interface configured to display a query result of the query expression"
[fig 4, col 7, line 42-54], Hoppe specifically teaches user interface particularly visual interface that allows visual representation of query results as detailed in fig 4;

a query statement generator configured to: determine Boolean associations corresponding to the semantic relationship of the shapes [col 3, line 7-8, col 10, line 9-12, fig 7-8;

'generate a query statement for each shape of query criteria' [col 10, line 27-34, fig 8-9], Hoppe specifically teaches generating query statement for and displaying a Venn diagram as detailed in fig 8-9;

'combine the query statements according to the Boolean associations to generate the query expression[col 10, line 36-41, line 42-44]; and

generate the query result of the combined query statements that form the query expression' [fig 8-9, col 10, line 45-54, line 55-65], Hoppe specifically suggests each circle from Venn diagram represents corresponding search expression and visually displaying the query result of the combined query statements as detailed in fig 8-9.

11. ***Claim 1-23, 35-58 is rejected under 35 U.S.C. 102(b) as being anticipated by Li et al. [hereafter Li], US Patent No. 5911138, published on June 8, 1999..***

12. As to claim 1, 35, Li teaches a system which including 'a visual query system
'[see col 2, line 4-6, fig 3A-3D],

'query criteria of a query expression displayed as shapes that have a semantic relationship which represents logical associations between the query criteria' [fig 3A-3B, col 5, line 17-19], Li specifically suggests query statement that corresponds to query criteria is displayed along with semantic relationship that represents logical associations between the query statements as detailed in fig 3A-3B;

'a user interface configured to display a query result of the query expression' [fig 3A-3D, col 4, line 59-60, line 64-66], Li specifically teaches graphical user interface using three windows, particularly the graph window show the results of the query statements or expressions as detailed in col 4, line 59-60, line 64-66;

'a query statement generator configured to: determine Boolean associations corresponding to the semantic relationship of the shapes' [col 5, line 12-15, fig 3A-3B], Li specifically teaches query statements particularly SQL statements for example as detailed in fig 3A, element 101 query 1, fig 3B, element 101, query 2;

generate a query statement for each shape of query criteria [see query 1, query 2, fig 3A-3B], Li specifically teaches generating query statement more specifically SQL statements corresponds to generating query statement for each of the query criteria;

'combine the query statements according to the Boolean associations to generate the query expression; and generate the query result of the combined query statements that form the query expression'[fig 3B-3D,col 5, line 39-53], Li specifically teaches multiple query statements for example query criteria and results are displayed as detailed in fig 3A-3D, query expression corresponds to query 2 as displayed in fig 3B, element 110, fig 3C, element 130

13. As to claim 2, 39, Li disclosed 'wherein the query statement generator is further configured to: generate the query statements as a SQL query statement for each shape of query criteria' [fig 6, col 10, line 24-28]; and generate the query result from a SQL query of the combined SQL query statements' [fig 6, col 10, line 28-36].

14. As to claim 3, Li disclosed 'wherein a first shape of query criteria is displayed proximate a second shape of query criteria such that the first shape has an AND Boolean association with the second shape' [fig 3A, element 102; fig 3B, element 102] particularly, graph window element 102 from fig 3A, 3B corresponds to respective graph shape with respect to query criteria.

15. As to claim 4-5, Li disclosed, 'wherein a first shape of query criteria is displayed proximate a second shape of query criteria within a visual query definition such that the first shape has an AND Boolean association with the second shape within the visual query definition' [fig 3A-3B, element 104 and element 110], Li specifically suggests

query statement 1, and query statement 2 particularly SQL having Boolean association as detailed in fig 3A, query 1.

16. As to claim 6, 57, Li disclosed wherein a first set of query criteria are displayed within a first visual query definition [fig 3A], first query displayed corresponds to fig 3A, element 102,101,; and wherein a second set of query criteria are displayed within a second visual query definition [fig 3B, element 102, element 101 related to query 2,; the first set of query criteria including the second set of query criteria such that the second visual query definition is displayed within the first visual query definition' [fig 3B, element 108, Li specifically suggests query 1 and query 2 are part of the root query as detailed in fig 3B, element 108.

17. As to claim 7, 19, 45, Li disclosed wherein: a first set of query criteria are displayed within a first visual query definition [see fig 3A]

'a second set of query criteria are displayed within a second visual query definition' [see fig 3B], the first set of query criteria including the second set of query criteria such that the second visual query definition is displayed within the first visual query definition' [fig 3A, element 105, element 101], Li specifically suggests displaying both query in the query window, element 101 and graph window element 105; ; and the query statement generator is further configured to generate a first query result of the first set of query criteria and generate a second query result of the second set of query

Art Unit: 2166

criteria such that the first query result and the second query result can be displayed as multiple query results' [fig 3A-3B, col 5, line 52-55].

18. As to claim 8, 20, 46-47, Li disclosed 'determine an additional Boolean association corresponding to the semantic relationship of the additional shape of query criteria [see fig 3A, query 1 statement], Li specifically suggests SQL query having additional Boolean association;

'generate an additional query statement for the additional shape of query criteria;[fig 3A-3B]

'combine the query statements and the additional query statement according to the additional Boolean association' [fig 3C, query window element 101, 130]

'update the query result of the combined query statements and the additional query statement [[col 6, line 1-7].

19. As to claim 9, 22, 44, Li disclosed 'further comprising data tables that maintain data criteria, and wherein the query criteria is displayed in user-identifiable terms as metadata that correlates to the data criteria maintained in the data tables' [col 10, line 5-14], Li specifically suggests using relational database tables that containing pictorial information and like as detailed in col 10, line 5-14.

Art Unit: 2166

20. As to claim 10, 21, 38, 40, 53, Li disclosed 'display criteria selections that include the query criteria within a criteria selection display on the user interface' [fig 3A, element 102, element 101], Li specifically teaches displaying query in the query window, and results as graph window as detailed in fig 3A;

display the shapes of query criteria within a visual query definition on the user interface [fig 3A-3B, element 102];

'display the query result within the visual query definition' [fig 3A-3B, element 105, 102]..

21. As to claim 11, 23, 48, 58, Li disclosed 'further comprising an audio output device configured to generate an audible indication corresponding to at least one of an update or a display of the query result' [fig 2, element 31, 15A-15B,col 4, line 3-8].

22. As to claim 12, 50, Li teaches a system which including 'a visual query system' [see col 2, line 4-6, fig 3A-3D]; 'a visual query definition displayed to associate query criteria of a query expression, [fig 3B, element 110], query expression corresponds to query window query 2 as shown in fig 3B, element 110 specifically related to query; the query criteria displayed as shapes within the visual query definition [see fig 3B, element 112], Li specifically teaches displaying "graph window" related to "query criteria" such that proximate positions of the query criteria define query criteria associations' [col 4, line 59-67, col 5, line 1-7], visual query definition displayed to associate query

criteria corresponds to Li's fig 3A,3B, because Li specifically teaches displaying query criteria for example fig 3A, element 104, query 1;

' a query statement generator configured to: determine a query statement association for each display relationship of the query criteria' [col 5, line 12-15, fig 3A-3B], Li specifically teaches query statements particularly SQL statements for example as detailed in fig 3A, element 101 query1, fig 3B, element 101, query 2 and displaying relationship of each query with respect to query root as detailed in fig 3A, element 109, fig 3B, element 108;

generate a query statement for each of the query criteria [see query 1, query 2, fig 3A-3B], Li specifically teaches generating query statement more specifically SQL statements corresponds to generating query state for each of the query criteria;

combine the query statements according to the query statement associations to generate the query expression; and generate the query result of the combined query statements for display in the visual query definition' [fig 3B-3D,col 5, line 39-53], Li specifically teaches multiple query statements for example query criteria and results are displayed as detailed in fig 3A-3D, query expression corresponds to query 2 as displayed in fig 3B, element 110, fig 3C, element 130

23. As to claim 13, Li disclosed wherein the visual query definition is further configured to associate the query criteria in the display without logic operators connected between the query criteria' [fig 6, element 406].

24. As to claim 14,36,51, Li disclosed 'wherein the query statement generator is further configured to determine the query statement associations as a Boolean association for each display relationship of the query criteria. [fig 3A, element 102; fig 3B, element 102] particularly, graph window element 102 from fig 3A, 3B corresponds to respective graph shape with respect to query criteria.

25. As to claim 15, 37, 52, Li disclosed 'wherein the query statement generator is further configured to generate the query statements as a SQL query statement for each query criteria' [see fig 3A-3B, query 1, query2], Li specifically teaches SQL queries as detailed in fig 3A-3B.

26. As to claim 16-17, 41-43,54-56, Li disclosed wherein a first query criteria is displayed proximate a second query criteria within the visual query definition such that the first query criteria has an AND query statement association with the second query criteria' [fig 3D, element 142], Li specifically suggests SQL query statement has an AND query as detailed in fig 3D, element 142; it is further noted that Boolean "OR" , "AND", and like is integral part of Li's teaching because Li specifically supports and teaches ANSI standard structure query language (SQL) [col 4, line 26-28].

27. As to claim 18, Li disclosed 'wherein the visual query definition is bordered to define a query statement association between a first query criteria displayed proximate a second query criteria within the visual query definition' [col 5, line 8-14].

28. ***Claim 24- 34 is rejected under 35 U.S.C. 102(b) as being anticipated by Jain et al. [hereafter Jain], US Patent No. 5913205, published on June 15, 1999.***

29. As to claim 24, Jain teaches a system which including 'a user interface' [fig 3, element 200], user interface corresponds to Jain's fig 3, element 200;

'a criteria selection display of query criteria' [fig 3, 'search criteria dialog box];

'a visual query definition displayed to associate the query criteria of a query expression each of the query criteria represented by a shape displayed within the visual query definition' [fig 2-3, col 10, line 49-55], Jain specifically teaches visual query canvas particularly defining various tools for expressing the query visually as detailed in col 10, line 49-55 ; query expression corresponds to the search criteria as detailed in fig 3;

'a display attribute of the visual query definition that defines a Boolean association of the query criteria represented by the shapes displayed within the visual query definition' [fig 3-4, col 11, line 10-17, line 30-35], Jain specifically teaches query criteria that including "Boolean" as detailed in fig 3, further, Jain also suggests defining visual query particularly thumbnail related to shapes displayed is part of the visual query definition as detailed in col 11, line 30-35;

a query result displayed within the visual query definition, the query result generated from a combination of one or more query statements that are combined to generate the query expression, [fig 5A, query canvas that initiates query generation, col 11, line 51-52] the one or more query statements representing a shape of query

Art Unit: 2166

criteria and the association of the query criteria' [col 10, line 66-67, col 11, line 1-5, line 21-27, line 30-31], Jain specifically teaches Query window for the visual and textual aspects of the basic visual query definition, further Jain also teaches query selection criteria and displaying of the query results as detailed in col 10, line 66-67, col 11, line 1-5, line 21-27.

30. As to claim 25, Jain disclosed 'wherein the visual query definition is further displayed to associate the query criteria based on proximate positions of the query criteria in the visual query definition and without logic operators connected between the query criteria' [fig 2, col 10, line 49-55].

31. As to claim 26, Jain disclosed 'wherein the query criteria are drag-and-drop query criteria from the criteria selection display to the visual query definition' [col 10, line 55-59].

32. As to claim 27, Jain disclosed 'wherein the visual query definition can be copied to create a second visual query definition for display on the user interface, and wherein the second visual query definition is redefined in an event that the visual query definition is redefined' [col 9, line 11-18].

Art Unit: 2166

33. As to claim 29, Jain disclosed, "wherein a color of the visual query definition defines the Boolean association of the query criteria represented by the shapes displayed within the visual query definition" [fig 3, query window, search criteria, element 204,206].

34. As to claim 30, Jain disclosed 'wherein a border of the visual query definition defines a Boolean association of the query criteria represented by the shapes displayed within the visual query definition' [fig 3, element 204, shape; fig 4, element 220]..

35. As to claim 31-32, Jain disclosed 'wherein the one or more query statements are SQL query statements, and wherein the query result is generated from the combination of the one or more SQL query statements' [fig 3, col 4, line 23-27]..

36. As to claim 33, Jain disclosed 'wherein a first shape of query criteria is displayed proximate a second shape of query criteria within the visual query definition such that the first shape has an OR query statement association with the second shape [see fig 3, search criteria]

37. As to claim 34, Jain disclosed 'additional query criteria not associated with the visual query definition and displayed to indicate the non-association' [col 11, line 35-38].

Response to Arguments

38. Applicant's arguments filed on 4/3/2007 with respect to claims 1-27,29-58 have been fully considered but they are not persuasive, for examiner's response, see discussion below:

a) At page 22, claim 1, applicant argues "there is no indication in either Hoppe or Li that a query expression is generated or developed from shapes displayed on a user interface".

As to the argument [a]: examiner disagrees with the applicant because, firstly, Hoppe reference is directed to graphical representation of query, more specifically visualization of graphical representation of query [see Abstract], secondly, Hoppe specifically teaches generating not only query statements, but also displaying a "Venn" diagram as shown in fig 8-9, particularly Venn diagrams are in a specific shape[s], therefore, Hoppe disclosed query expression is generated or developed from Venn diagram as displayed in fig 8-9.

Further examiner noted that Li reference is directed to user interface allows user to query, more specifically Li teaches "query window" particularly graph window graphically displays "query statements" [see Abstract], it is also noted that query expressions from the "query window" are derived from "query graph window" as detained in fig 3A-3D, col 4, line 59-66.

b) At page 23, claim 1, applicant argues “neither Hoppe nor Li show or discloses “query criteria of a query expression displayed as shapes that have a semantic relationship which represents logical associations between the query criteria”.

c) At page 23, claim 1, applicant argues that neither Hoppe nor Li shown or discloses that the query expression can be generated from combined query statements generated for each shape of query criteria and from Boolean associations corresponding to the semantic relationship of the shapes

At page 23, claim 1, applicant argues that “there is no indication in Li that a query expression is generated from query statement and Boolean associations corresponding to semantic relationships of displayed shapes, as described in claim 1

As to the above argument [b-c], Examiner disagree with the applicant because Hoppe specifically teaches not only “SQL” queries, semantic relationship between categories of data for example in the relational database [col 6, line 47-52], but also logical associations of “Venn diagram” related to specific query expression or query criteria displayed as detailed in col 6, line 38-55, col 7, line 42-51, fig 2-4, fig 8-9, further it is noted that query window element 510 corresponds to the search scope of node element 326 [col 8, line 55-58] because Hoppe specifically teaches visual query language [col 3, line 27].

Further examiner noted that Li reference is directed to visual query system, more specifically query statements related to “graphical representation” [as shown in fig 3A-

3D] establishing semantic relationship that represents logical associations between query criteria and graphical representation as detain fig 3A-3D, col 5, line 17-19., further it is noted that query window specifically shows query statement using “Boolean operators” [see fig 3A-3D]

d) At page 23, claim 1, applicant argues “there is no indication in Li figs 3A-3B of “query criteria of a query expression displayed as shapes”.

e) At page 23, claim 1, applicant argues that neither of the text-based query 1(fig 3A) or query 2(fig 3B0 in Li is generated from shapes displayed as query criteria of a query expression.

As to the argument [d-e], examiner disagree with the applicant because Li specifically teaches not only graph window that displays bar graph shape, but also that bar graph shape represents “query expression[s] or query criteria” as shown in the query window [see fig 3A-3B], therefore, Li’s figs 3A-3B specifically teaches query criteria of a query expression displayed as shapes.

Art Unit: 2166

f) At page 24, claims 4-7,10, applicant argues that Li does not show or disclose “visual query definition”.

g) At page 24, claim 5, applicant argues that “there is no indication in Li of a visual query definition that includes shapes which are query criteria”

As to the above argument [f-g], examiner disagree with the applicant because, Li specifically teaches not only “query window”, history window, but also “graph window”, particularly graph window graphically displays “query statements” as bar graphs as detailed in fig 3A-3D], further it is noted that query criteria or query statements typically SQL statements using “Boolean” operators as detailed in fig 3A-3B, query 1, query 2.

h) At page 25, claim 10, applicant argues that “query result in Li is not displayed within a visual query definition”.

As to the argument [h], examiner disagree with the applicant because, Li teaches graphical user interface specifically displayed “graph window” representing query 1, query 2 as detailed in fig 3A-3B, corresponds to visual query definition.

Therefore, applicant’s remarks are deemed not to be persuasive, and claims 4-7,10 are rejected under 35 USC 102(b) as detailed above.

i) At page 26, claim 12, 50, applicant argues "Li does not show or disclose any such visual query definition, or that query criteria of a query expression are displayed as shapes.

As to the above argument [I], examiner disagree with the applicant because, Li teaches multiple query statements, more specifically SQL statements and in the "graph window" displaying "visual query" representing "bar graph" equivalent to the respective query statements as detailed in fig 3B-3D, col 5, line 39-53.

j) At page 26, claim 35, applicant argues that "Li does not show or disclose that query criteria of a query expression are displayed as shapes on a user interface".

As to the above argument [j], examiner disagree with the applicant because Li specifically teaches not only graph window that displays bar graph shape, but also that bar graph shape represents "query expression[s] or query criteria" as shown in the query window [see fig 3A-3B], therefore, Li's figs 3A-3B specifically teaches query criteria of a query expression displayed as shapes.

Examiner applies above discussed argument to claims 13-23, 36-49, 51-58 depend from claim 12, 35, 50.

k) At page 27, claim 24, applicant argues that "Jain does not show or disclose any such visual query definition, that query criteria of a query expression are represented by

Art Unit: 2166

shapes displayed within the visual query definition, or that a query result is displayed within the visual query definition”.

l) At page 28, claim 24, applicant argues that “Jain also does not show or disclose any such display attribute of a visual query definition itself that defines a Boolean association of the shapes that are the query criteria”

As to the above argument [k]-l, examiner disagree with the applicant because, firstly, Jain is directed to retrieving and storing visual objects, more specifically, directed to visual information management system particularly search visual databases with visual based queries [col 1, line 57-58], secondly, Jain specifically teaches displaying search criteria dialog box [see fig 3] particularly query window that allows users to select required objects and generate search criteria using “Boolean” operators as detailed in fig 3, thirdly, it is noted that visual query canvas defines various tools that including shapes for generating visual query expressions as detailed in col 10, line 49-55.

Examiner applies above arguments to depend claims 25-34

Conclusion

The prior art made of record

- | | | |
|----|-----------------|---------|
| a. | US Patent . No. | 5515488 |
| b. | US Patent . No. | 5911138 |
| c. | US Patent . No. | 5913205 |

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

sc
Patent Examiner.
June 13, 2007.


SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER